

**RESTORATION INFORMATION MANAGEMENT SYSTEM  
FORMERLY USED DEFENSE SITES (FUDS)  
PROJECT FACT SHEET  
SEPTEMBER 1997**

**HNC REVISION: 16 APRIL 1998  
TAG REVIEW DATE: 21 MAY 1998**

1. **SITE NAME:** Lake Bryant Bombing and Gunnery Range  
**SITE NUMBER:** I04FL018700

**LOCATION:**  
City: Ocala  
County: Marion County  
State: Florida

**PROJECT NUMBER:** I04FL018701

**CATEGORY:** OE

**INPR RAC:** 4

**ASR RAC:** 3

**TAG RAC:** 3

2. **POC'S:**

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3. **SITE DESCRIPTION:** The former Lake Bryant Bombing and Gunnery Range consisted of 40,587 acres located 22 miles east of Ocala, Florida, Marion County. Ocala is a development of about 42,000 people. New development in the area is limited to residential dwellings. The site is part of the Ocala National

Forest and is owned by the United States Department of Agriculture, Forest Service.

The site is located in the Floridian Section of the Coastal Plain physiographic province, in a swamp area with intermittent ponds. The Juniper Creek passes through the northeast corner of the site and the Oklawaha River passes outside the eastern border. All surface runoff drains toward the intermittent ponds, the Juniper Creek or the Oklawaha River. Clayey sands cover the majority of the site. The clayey sands contain silt, fine to coarse sand, and a small amount of gravel bound together by a clay matrix. These fine sandy soils are subject to erosion by the wind. This type of clayey sediment is indicative of the cover-collapse sinkhole area. Within this area, the soils are shallow and numerous sinkholes may develop abruptly. Vegetation for various areas of the site include: large trees and moderate to thick underbrush; forested and grassland tracts; scrub type growth; and shallow lakes.

Climate is subtropical. It is characterized by long, warm, humid summers and mild, relatively dry winters. The maritime influence moderates the heat of summer and the cold of winter. The average daily minimum and maximum temperatures for January are 46° F and 71° F. The average daily minimum and maximum temperatures for July are 71° F and 92° F.

4. **SITE HISTORY:** The War Department (WD) acquired 40,587 acres for the former Lake Bryant Bombing and Gunnery Range in the early 1940's. On 27 June 1941, the WD acquired use of 23,167 acres for an Army bombing and gunnery range by means of a temporary use permit from the United States Department of Agriculture (USDA). By two Memoranda of Understanding with the USDA, the Army acquired more land in the same area: 3,354 acres by transfer and another 14,066 acres by conveyance bringing the total to 40,587 by 11 January 1943.

During World War II, the Lake Bryant Bombing and Gunnery Range was utilized by the United States Armed Forces Command and was under the jurisdiction of Pinecastle Army Air Field and the Orlando Army Air Base. The site was also known as the Ocala Bombing Range, the Ocala Bombing and Gunnery Range, and Ocala Aerial Bombing and Gunnery Range, and Ocala Range. The site was used for practice bombing (including the use of HE/GP bombs), AAF Board Projects, ground gunnery and rocket missions. There were also training facilities for fire fighting details. Observation towers were constructed on the site along with a camp area for the fire fighters.

At the conclusion of World War II, the WD determined the site was no longer required. It was declared surplus 2 December 1956. The entire 40,587 acre site was relinquished back to the USDA by letter of transfer dated 20 May 1947. Of these 40,587 acres, 5,765 acres are not eligible for the DERP-FUDS program because the Navy currently utilizes these acres for an active site, the Pinecastle Impact Range.

Navy usage of lands formerly belonging to and adjacent to the Lake Bryant Bombing and Gunnery Range are briefly described to provide a better understanding of the site. Between 2 August 1951 and 15 April 1985, the Navy acquired 5,895 (including 5,765 acres of former site acreage) acres by use permit from USDA for an impact range since developed and known as Pinecastle Impact Range. Development includes an administrative site, a tracking station, remote radar sites, towers and markers, and targets. The Navy acreage is located in what was the center of the former range and includes the former Army North Bomb Target (Area #5). The Navy site has been under the jurisdiction of Jacksonville NAS and most recently, Cecil Field NAS.

## 5. PROJECT DESCRIPTION:

### AREA #1

Size, Acres:	1,600 (Approximate acreage)
Former Use:	South Bomb Target
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Confirmed</b>
Type:	Napalm filled bombs, 100 lb white phosphorous bombs, 100 lb M38A2 practice bombs, 100 lb general purpose bombs, M1A1 cluster bombs with 23 lb fragmentation bombs, 5" HVAR rockets, 260 lb AN-M81 VT fuze fragmentation bombs, AN-M30A1 and AN-M1A1 ground burst bombs.

### **AREA #1A**

Size, Acres:	<b>Included in 1,600 acres of Area 1</b>
Former Use:	South Bomb Target (Extra Acreage, shown on Plate M-1 to the north of South Bomb Target)
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordinance Presence:	<b>Potential</b>
Type:	Not stated in ASR. Probably the same items confirmed in Area 1: Napalm filled bombs, 100 lb white phosphorous bombs, 100 lb M38A2 practice bombs, 100 lb general purpose bombs, M1A1 cluster bombs with 23 lb fragmentation bombs, 5" HVAR rockets, 260 lb AN-M81 VT fuze fragmentation bombs, AN-M30A1 and AN-M1A1 ground burst bombs.

### **AREA #2**

Size, Acres:	100 (Approximate Acreage)
Former Use:	South Firing Range
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordinance Presence:	<b>None</b>
Type:	Small Arms Ammunition

### **AREA #3**

Size, Acres:	2,400 (Approximate Acreage)
Former Use:	West Central Range
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordinance Presence:	<b>Confirmed</b>
Type:	Small Arms Ammunition, M74 incendiary Bomb, M83 4 lb. frag bomb

#### **AREA #4**

Size, Acres:	ASR does not provide this information
Former Use:	"Jap Factory" Target
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Potential</b>
Type:	Sand filled 1000 lb. FELIX bombs (steerable bombs that could be steered to focus on sources of radiant energy)

#### **AREA #5**

Size, Acres:	800 (Approximate Acreage)
Former Use:	North Bombing Target (that part north of the current Navy land facility)
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Potential</b>
Type:	Not stated in ASR. Possibly bombs, including HE, since the general area was once restricted to surface use only following an initial decontamination survey.

#### **AREA #6**

Size, Acres:	2,600 (Approximate Acreage)
Former Use:	"Jap City" Target
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Confirmed</b>
Type:	AZON 1000 lb (VB-1), 2000 lb (VB-2), 2000 lb bomb (General Purpose, AN/M66), 100 lb bomb (General Purpose, AN/M30 Practice bombs), 1000 lb bomb

#### **AREA #7**

Size, Acres:	320 according to the ASR author
Former Use:	Farles Lake Water Bombing Target
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Potential</b>
Type:	35 lb powderless bombs
ASR Recommends:	Does not apply-Outside of site boundary
HNC Safety:	Does not apply-Outside of site boundary

#### **AREA #8**

Size, Acres:	320 (Approximate Acreage)
Former Use:	Farles Lake Rifle Range
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Potential</b>
Type:	Small Arms Ammunition, bombs-type not specified in ASR

#### **AREA #9**

Size, Acres:	3,354 (Approximate Acreage)
Former Use:	North Air-to-Ground Gunnery Range
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Potential</b>
Type:	Small Arms Ammunition

#### **AREA #10**

Size, Acres:	600 (Approximate Acreage)
Former Use:	Far North Bombing Area
Present Use:	USDA Forest Service, Ocala National Forest Lumber Production/hunting
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Confirmed</b>
Type:	M30 bomb

## **AREA #11**

Size, Acres:	1,773 (Approximate Acreage)
Former Use:	Off-Site Restricted
Present Use:	USDA Forest Service, Ocala National Forest
Probable End Use:	USDA Forest Service, Ocala National Forest
Ordnance Presence:	<b>Potential</b>
Type:	Not specified in ASR

6. **CURRENT STATUS:** The draft Archives Search Report (ASR) for Lake Bryant Bombing and Gunnery Range was completed by the U.S. Army Corps of Engineers, St. Louis District, in September 1997.

## 7. **STRATEGY:**

**AREA #1:** RAC 3;EE/CA  
**AREA #1A:** RAC 3;EE/CA  
**AREA #2:** RAC 3;EE/CA  
**AREA #3:** RAC 3;EE/CA  
**AREA #4:** RAC 3;EE/CA  
**AREA #5:** RAC 3;EE/CA  
**AREA #6:** RAC 3;EE/CA  
**AREA #7:** Not within the project area  
**AREA #8:** RAC 3;EE/CA  
**AREA #9:** RAC 3;EE/CA  
**AREA #10:** RAC 3;EE/CA  
**AREA #11:** Not within the project area

8. **ISSUES AND CONCERNS:** The Huntsville Center Technical Advisory Group (TAG) reviewed this ASR on 21 May 98 and determined RAC 3, EE/CA for all 40,587 acres of the site, with the exception of Areas 7 and 11, which are not within the boundaries of this Formerly Used Defense Site.

The ASR points out that most ordnance items recovered from this range have been found in the vicinity of established target and firing locations; however, the potential for ordnance items could be anywhere on the range. There are no warning signs at the site.

Historical data seems to indicate that significant live ordnance items might exist on the former Lake Bryant Bombing and Gunnery Range. Even with the presence of these items on the site, the lack of populated areas close to those locations resulted in a RAC 3. **Tom Freeman, the ASR author concurs with RAC 3, EE/CA for the site but is concerned regarding the potential for 1,000 lb. high explosive bombs which would seem to indicate a higher**

priority, RAC 1. At a minimum he recommends that warning signs be posted at the site. He believes further investigation with a magnetometer at some of these rugged areas should be done in the immediate future to determine if a higher priority would be warranted.

**HNC Safety Comments:** Concurs with a strategy of RAC 3, EE/CA for this site. States that "295 HE M-74 WP (White Phosphorous)" needs to be changed to "295 M-74 Incendiary Bombs" on page 2-11 of the Conclusions and page 4-11 of the Findings. There were also questions concerning the "toxic gas handling areas" and "all toxic gas ranges" mentioned in the ASR. The response was to ignore these comments as they did not specifically pertain to the Lake Bryant Bombing and Gunnery Range. Rather these phrases are in reference to other sites under the jurisdiction of Pinecastle Army Air Field.

**Range Clearances and Correspondence Regarding Decontamination at the Site:** There were numerous references regarding clearance and decontamination at the site. Hundreds of live munitions and close to 8,000 inert items were disposed of during the original clearance operations.

**Acreage of areas within the site:** The ASR provides the **approximate** acreage for some of the areas. Those for Areas 1, 3, 5, 6, 8, 10 and 11 are in the table above. The acreage for Area 9 is in the text of the ASR. Initial examination and comparison of the areas as indicated on a site map in Report Plate M-1 indicated that the acreage provided for each site and the way it is depicted on the map are at variance.

When asked about the acreage on the sites, Tom Freeman, the ASR author, provided the following clarifications regarding Report Plate M-1: (1) Area 1 as outlined in red should also include the area shaded brown to the north and referred to as Area 1A. (2) Area 3, outlined in red, should also include the surrounding area shaded in brown, including the adjacent rectangular appendage to the west. (3) Area 5, depicted as an area within a circular dashed red line, is actually the brown area at the northern border of the rectangular area which includes the green shaded portion. (4) Area 6, which is shown as an area outlined by a red border, should actually include not only the surrounding area bordered by a line with dots but also that adjacent area to the northeast with the diagonal lines slanted northeast to southwest. (5) Area 7 is approximately 320 acres and the location shown is the approximate location.



**South Bomb Target (Area #1), 1,600 acres:** The target location is latitude 29° 02' 30" and longitude 81° 48' at T17S, R25E, Section 3. The South Bomb Target is first shown as a demolition target. Later it is listed as the location where "enemy" anti-aircraft batteries were set up to evaluate various methods of destruction. Weapons expended on the batteries included high explosive bombs, fragmentation bombs, practice bombs, and rockets. The on-site inspection in 1997 revealed many large diameter craters, on average about 25 feet in diameter and 6 feet deep, still remaining. The Forest Service has not reported any ordnance items being found recently in this area. No ordnance items were found during the site inspection. Historical clearance documents do not indicate any specific ordnance items being removed during the post-war clean-up.

**South Bomb Target-Extra Acreage (Area #1A), this acreage is included in the 1,600 acres of Area 1 according to the ASR author:** Extra acreage is shown on Plate M-1 to the north of South Bomb Target. Ironically, the map prepared by the Corps of Engineers to show areas restricted to surface use only after decontamination does not indicate any restricted locations for **Area #1**, but does for **Area #1A**. M6 rockets are indicated as the basis of the restriction.

**South Firing Range (Area #2), 100 acres:** Historical air photos show the outline of a fan-shaped firing range constructed to the east of the South Bomb Target. None of the air photos show any kind of firing marks on the site. Layout plans indicate that it was an incomplete range. No ordnance items were discovered during the site inspection. Although the ASR does not provide more information on this area, it would seem, that if used, only spent small arms ammunition would be present.

**West Central Range (Area #3), 2,400 acres:** The location of this range is centered on T16S, R26 E, Sections 18 and 19. From air photos this range appears to have been set up as a rifle range with three berms at 800 feet, 1600 feet, and 2400 feet from the firing line. The range was located adjacent to Forest Service Road 18. There is no documented use. However, the decontamination map shows the area around the berms and a similar size area west of the Forest Service road to be restricted to surface use only. The items listed for the restriction are M-74 incendiary bombs and M-83 butterfly bombs. A sequence of air photos for the site indicate that the site was cleared during the time of military use, trees grew, and were recently harvested. No ordnance items were found during the site inspection.

**"Jap Factory" Target (Area #4), Acreage not specified:** The Jap Factory Target was set up for use in a special test of heat-

seeking bombs run under the direction of Massachusetts Institute of Technology (MIT). Sand-filled bombs outfitted with experimental guidance units were dropped on a mock-up of a Japanese factory. The heat generated by operations in the factory were replicated by using oil burning smudge pots placed under the tin roof. Aerial photography did not reveal any cratering in the area. No ordnance items were found during the SLD site inspection. If sand filled bombs were the only items used in this area, there would be no OE hazard.

**North Bomb Target-that part north of the current Navy facility (Area #5), 800 acres:** The location of this target is centered on T16S R26E, Section 9. The North Bomb Target was one of the original range locations and was intended for practice bombing. It was a cleared circular area about two miles in diameter. Historical aerial photography shows a considerable amount of ground disturbance. This entire target area, with the exception of a portion along the northern edge outside of the present-day Navy range, is included in the currently active U.S. Navy Pinecastle Target. The decontamination map indicates a significant number of duds found in the vicinity of this range. After the initial decontamination survey, nine sections of land around the North Bomb Target (Area #5) were restricted to surface use only. Subsequently the Navy used most of these nine sections for their Pinecastle Range.

**"Jap City" Target, (Area #6), 2,600 acres:** The target location is latitude 29° 08' 30" and longitude 81° 48' at T15S, R26E, Sections 27-29 and 32-34. The Jap City Target was originally set up as an air-to-ground gunnery range with the direction of flight from the northwest to the southeast. The main activity at this location, however, was bombing with high explosives of a mock-up of a Japanese city. Documents indicate that high explosive bombs up to 2000 pounds were dropped on the target. VB-1, VB-2, and VB-3 type bombs (1000 pound and 2000 pound) equipped with external guidance systems were used. Records indicate that there numerous malfunctions with these bombs. Historical air photos indicate a significant amount of ground disturbance was present in the area after the bombing activities. The on-site inspection team found numerous large craters (30 feet in diameter and up to 10 feet deep), but did not discover any ordnance items or debris. Historical correspondence from 1965 between the Forest Service and the Corps of Engineers reveals that 1000-pound bombs and other live items might still remain in this area. Among these areas of interest, a site of primary concern would be Sections 27, 28, 33, and 34 in the vicinity of the former "Jap City" Target. Information obtained from Mr. John Campbell, Jacksonville District COE and shown in Forest Service document #36 (included in the Findings volume of the ASR) indicates that in 1965 two of the sections, 27 and 28, were still loaded with

"hot stuff". Additionally, Mr. Campbell stated that live 1000-pound bombs remained in sections 33 and 34. Mr. Campbell was active in many of the ordnance clearances throughout Florida after World War II. There was no subsequent mention in the Forest Service decontamination file of any removals from these sections.

**Water Bombing Target, (Area #7) 320 acres according to the ASR author:** The ASR states that this target was one of the original targets on the Lake Bryant Range. However, **Plate M-1 shows that this site is outside the site boundary.** Historical documents indicate that the target was located in the northern end of Farles Lake. There were no details of the type of construction. The ASR only states thirty-five pound bombs were dropped on this target without further identifying the bomb. **Since the map shows this target outside the bounds of the site, this target would not be part of this project unless the project was amended.** This target lies within low lying lakes and would not be accessible.

**Rifle Range Farles Lake Area, (Area #8), 320 acres:** Historical documents indicate that the military established a rifle range in the central portion of the Lake Bryant Range southwest of the Farles Lake Area. There were 10 targets above a concrete wall at the foot of a hill with the firing line 200 to 300 feet away. This site was near the range operations camp. Documented use of the range included not only rifle firing, but also inadvertent bombing and strafing. Historical documents indicate that bombing may have taken place near the Farles Lake Rifle Range (Area #8), even though it was not intended for this use.

**Air-to-Ground Gunnery Range (Northern), (Area #9), 3,354 acres:** The military developed an air-to-ground gunnery range in the extreme northeastern portion of the Lake Bryant Range area. Six panel targets on an area of 2100 x 7800 feet were located immediately adjacent to Forest Service Road 15 north of Florida State Highway 40. The direction of fire was supposed to be from the north to the south. Air photos show the construction and use of the site. Currently the site is located in an access-restricted wilderness area (no vehicular traffic). The site is presently heavily overgrown. The SLD site inspection team was able to view the site from the northeastern edge.

**Far North Bombing Area, (Area #10), 600 acres:** Historical documents indicate that the military used this area in the northern extreme of the Lake Bryant Range to test the effectiveness of bombing in jungle-type vegetation. Aerial photos do not reveal that any type of formal target was developed. The post-war decontamination effort uncovered dud munitions remaining in the area. These items included M-30 bombs

and M-4 spotting charges. After the deduidding operations the area was restricted to surface use only. The site is currently a part of the Forest Service's, access-restricted, wilderness area. The Ocala National Recreation Trail does traverse the area.

**Off Site Restricted Area, (Area #11), 1,773 acres:** This area, which is not part of the FUDS, adjoins the northwestern boundary of the site where the heavily bombed Area 6 is located. The only information in the ASR regarding Area 11 was that a historical map listed this area as a restricted area (see plate M-2 which shows that M-26(Flares) were found here). Based on findings in the adjacent areas within the site, Area #11 might merit further investigation as part of this project.

**CWM:** The ASR states that no documentation was reviewed substantiating the use or storage of chemical warfare materials on the Lake Bryant Bombing and Gunnery Range.

**Natural Resources:** Federally and State threatened species occur within the site area and are listed in the ASR Findings, pages 3-4 thru 3-6, para 3.5. An on-site inspection by appropriate State and Federal personnel may still be necessary to verify the presence, absence or location of listed species, or natural communities.

**Historical Resources:** The ASR does not address historical or cultural resources. Any intrusive measures taken within the area will require oversight by the State Historical Preservation Office and/or other like organizations.

9. **SCHEDULE SUMMARY:** EE/CA

10. **FUNDING/BUDGET SUMMARY:** For Official Use Only